

GW TECHNOLOGY:

Chemical Oxidation

RACER PARAMETERS	Scenario A	Scenario B	Scenario C	Scenario D
	Small Site		Large Site	
Remedial Action:	Easy	Difficult	Easy	Difficult
Media/Waste Type	Groundwater	Groundwater	Groundwater	Groundwater
Contaminant	VOCs	VOCs	VOCs	VOCs
Approach	Ex situ	Ex situ	Ex situ	Ex situ
System Definition:				
Contaminant	cis-1,2 Dichloroethylene	Trichloroethylene	cis-1,2 Dichloroethylene	Trichloroethylene
Influent Flow Rate (GPM)	20	20	100	100
Influent Concentration (mg/L)	N/A	10	N/A	10
Effluent Concentration (mg/L)	N/A	0.01	N/A	0.01
Safety Level	D	D	D	D
O&M:				
Assign Startup Costs	Exclude from estimate	Exclude from estimate	Exclude from estimate	Exclude from estimate
Duration (YR)	2	2	5	5
Treatment Train Systems Maintenance Level	Moderate	Moderate	Moderate	Moderate
Sampling Frequency	Monthly	Monthly	Monthly	Monthly
Chemical Oxidation Marked-up Costs	\$181,842	\$180,030	\$335,248	\$330,597
Additional Costs:				
O&M	\$127,638	\$170,520	\$446,198	\$668,839
Remedial Design (10% or 10K)	\$18,184	\$18,003	\$33,525	\$33,060
TOTAL MARKED-UP COSTS	\$327,664	\$368,553	\$814,971	\$1,032,496
Gallons processed	21,024,000	21,024,000	262,800,000	262,800,000
COST PER GALLON	\$0.02	\$0.02	\$0.003	\$0.004
COST PER 10,000 GALLONS	\$156	\$175	\$31	\$39